Abstract of the disclosure

The present invention relates to a controlled acoustic waveguide of the type of an elongate hollow chamber (1) which communicates with a sound-transmitting duct (4) via an opening (2) in its first end surface (3), wherein the longitudinal resonances of the hollow chamber (1) may be tuned to a sound spectrum to be attenuated, by detecting the membrane vibrations by means of a microphone (10) located directly in front of the membrane (8) of at least one loudspeaker (9) on the second end surface (6) of said hollow chamber (1), and by inverting the microphone signal by means of an amplifier (11) and by feedback of the inverted microphone signal to said loudspeaker (9) in an amplified form in dependence on a signal from a sensor (12), which is characteristic of the sound in said duct (4).